MAINE FARMER
AND JOURNAL OF THE USEFUL ARTS.

BY WILLIAM NOYES & CO.] "OUR HOME, OUR COUNTRY, AND OUR BROTHER MAN." [E. HOLMES, EDITOR.

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THE MAINE FARMER

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AGRICULTURAL.

From the Farmer and Rural Economist.

LIQUID MANURE.

Water in its purest state, when it has been distilled or filtered through sand, still retains somewhat of the food of plants. Its component parts, oxygen and hydrogen, under certain circumstances, are seized by vegetables while in their growing state, & converted into the products which form the constituents of all vegetables. But pure water forms a meagre diet for plants. It may support life in vegetables, and some plants will maintain a feeble growth with very little nourishment except what is afforded them by pure water and air. But when water is impregnated with certain salts and gases, particularly such as are evolved during the fermentation and decomposition of vegetable and animal substances, it becomes what is called LIQUID MANURE. Urine, or the stale of all animals is water holding in solution certain salts and other substances, which are the *essence of manure*, or the food of plants in a concentrated state.

Fresh urine is a very powerful and efficacious manure, when properly applied, but if not mixed with solid matter it should be diluted with water, as when pure it contains too large a quantity of animal matter to form a proper fluid nourishment for absorption by the roots of plants. Urine is lessened in the value, but its useful qualities are not entirely lost, by putrescence. During putrefaction the greatest part of the soluble animal matter that urine contains is destroyed; it should therefore be used as fresh as possible, with the precaution of diluting it with water, or mixing it with earth. Putrid urine, however, is a valuable manure. It abounds in ammoniacal salts; and though less active than fresh urine, is very efficacious.

According to some writers, and practical farmers, the value of the urine or cattle, if properly preserved and applied to the purposes of vegetation, is greater than that of all the dung which the same animals would yield! A letter from Charles Alexander, near Peebles, in Scotland, addressed to Sir John Sinclair, in 1812, for publication, contains much valuable information on this subject, 'This intelligent farmer had long been impressed with the great importance of the urine of cattle as a manure, and he set about to discover by a long and well conducted series of experiments, the best method of collecting and applying it. He began by digging a pit contiguous to the feeding stall, but distinct altogether from that which was appropriated for the reception of the dung. The dimensions of this pit, according to his own account, were 36 feet square, and four feet deep, surrounded on all sides by a wall; and the solid contents were 192 yards. Having selected the nearest spot where he could find loamy earth, and this he always took from the surface of some field under cultivation, he proceeded to fill it; and found that, with three men and two horses he could easily accomplish 28 cubic yards per day; and the whole expense of transporting the earth did not exceed 4*l*. 16*s*. sterling, [about 22 dollars.] When the work was complete, he levelled the surface of the heap in a line with the sewer, which conducted the urine from the interior of the building, on purpose that it might be distributed with regularity, and might saturate the whole from top to bottom. The quantity conveyed to it he estimates at about 800 gallons; but as this calculation was founded partly on conjecture, for he measured not the liquor, it will be better and more instructive to furnish and proceed on DATA that are certain and incontrovertible. The urine was supplied by fourteen cattle, weighing about 34 stone [476 lbs.] each, and kept there for five months on fodder and turnips.—The contents of the pit produced 288 loads, allowing two cubic yards to be taken out in three carts; and he spread 40 of these on each acre, so that this urine in 5 months, and from fourteen cattle, produced a compost sufficient for the fertilization of seven acres of land. He states farther, that he had tried this experiment for ten years, and had indiscriminately used in the same field either the rotted cow-dung or the saturated earth; and in all stages of the crop, he had never been able to find any perceptible difference. But what is still more wonderful, he found his compost lasted in its effects as many years as his best putrescent manure; and he therefore boldly avers, that a load of each is of equivalent value.

'It appears, then, that in five months each cow discharges urine, which, when absorbed by loam, furnishes manure of the richest quality and most durable effects for half an acre of ground. The dung-pit, which contained all the excrementitious matter of the fourteen cattle, as well as the litter employed in bedding them, and which was kept separate for the purpose of the experiment, only furnished, during the same period, 240 loads, and these at the same rate, could only manure six acres. The aggregate value of the urine, therefore, when compared with that of the dung, was in the old ratio of 7 to 6; so that we are borne out by these premises in this extraordinary inference, that the putrescible liquor, which in this province [Nova Scotia,] and under the management of our farmers, is wasted and annihilated as far as regards any useful purposes, is intrinsically worth more than the dung, as an efficacious and permanent dressing; and if we take into consideration that this latter manure is not treated with any skill and judgment, it will not seem surprising, that the culture of white crops has never been carried here to any extent, since we have despised and neglected the only means of creating them.'

We apprehend that the farmers of the Uuited States are not, generally speaking, any more solicitous to turn the urine of their cattle to account for manure, than those of Nova Scotia. There are some cultivators, however, who have taken measures to secure this substance, and to apply it to useful purposes. Mr. Robert Smith, of Baltimore, has his stables constructed in such a manner that all the liquid discharges of his cattle are conducted, together with the wash of the barnyard, into a cistern, pumped into a hogshead, and applied in a liquid state to the soil which it is wished to manure. This mode of making use of this substance is likewise recommended in the *Code of Agriculture* as follows:—'The advantages of irrigating grass lands with cow urine almost exceed belief. Mr. Harly, of Glasgow, (who keeps a large dairy in that town,) by using cow urine, cuts some small fields of grass six times, and the average of each cutting is fifteen inches in length. There are disadvantages, however, attending this mode of applying this powerful manure. It must be applied soon after it is formed, or oftentimes the putrefactive process will commence, and deprive it of a part of its efficacy. And as urine is of a scorching quality, it is unsafe to apply it to growing crops in great heat or drought. Hence it is unadvisable to use it, except for grass, after the month of April or May, unless diluted. It is particularly useful in the spring, when the application of liquid manure gives a new impetus to the plant, and makes its growth more vigorous. This manure forces newly planted cabbages in a most remarkable manner.'

If it be true that more manure can be obtained from the stale of cattle than from their dung and litter, in the proportion of 7 to 6 (as would seem by Mr. Alexander's experiments as above detailed,) and that by our common modes of husbandry this stale is nearly or quite squandered away, the discovery is of very great importance

indeed to agriculture. It is nothing less than a method by which farmers may, with a small expense, somewhat more than double their usual quantity of stable manure. And if farmers would 'value manure as a miser does his strong box—should grasp after and hoard it as eagerly and anxiously as a covetous man accumulates treasure,' surely the wise cultivator will not grudge some labor and expense to acquire more than double the usual quantity of so valuable an article. It is very true there are many things to be taken into consideration in all these economical processes. A principal inquiry should ever be whether the saving will cost more than the benefit arising from it will be worth. Many improvements, which are highly valuable in old and populous countries, where labor is cheap and land dear, cannot be advantageously adopted in this country, where the object, in general, is rather to make the most of our labor than of our land. It is to be recollected, likewise, that in New England, during a considerable part of the time in which cattle are usually housed, the liquid manure is soon converted into ice, and, in that state, must be transferred to the dung-heap, or inconvenient accumulations will take place before a thaw would render it practicable to separate the liquid from the solid parts of the manure. Still, with all these disadvantages, we believe, in most cases, it is highly advisable to preserve the liquid portion of stable-manure separate from the solid part; especially where cattle are soiled, or horses stabled during all or the greater part of the year.

THE FARMER.

WINTHROP, FRIDAY MORNING, JULY 18, 1834.

CAUTION TO HAYMAKERS.—The weather, which a few weeks since, was cold, cloudy and cheerless, has changed to very warm and sultry; and our farmers have commenced haying, the most laborious part of their business.

Caution in taking cold water and hot rum, must be used. Every paper brings us news of sudden deaths occasioned by the use of one or the other of these liquids, when in fact neither of them need be used at all. Good spruce beer is easily made, and will assuage thirst as effectually as any thing else; and what does a man drink for but to quench his thirst? Caution is the parent of safety; and it is better to preserve life by the use of a little of it mingled with "small beer" than wash it away in a mug of cold water, or scald it to death in a jug of hot rum.

PITTS' HORSE POWER.—Our farmers are waking up to the subject of labor saving machinery, especially as it regards threshing and cleansing their grain. They begin to find that by a little more exertion they can raise enough for their own families, and they find the importance of using some more easy and expeditious method of threshing. Since the introduction of the various threshing machines now in use, there have been various modifications of Horse Powers. Most of those introduced, although very good in many respects, are too expensive. The Farmer, whose profits are moderate at the best, does not feel able to expend so much money in an article of apparatus that the interest will eat up the profits of his crop. He must therefore study economy; and in regard to this, we think that Pitts' Horse Power will meet the wishes of all who want to purchase a power of this nature. It is made upon the principle of the endless band, upon which the Horse travels. This band is made of slats or lags of wood connected together by endless flat link chains, one on each end of the lags or slats—these pass over drums. The principal part of the invention consists in the mode of keeping up the band when the Horse is upon it. This is effected by means of a couple of boxes filled with little rollers or cylinders which roll over a shelf or sort of deck placed half way down the box and cut off a little at each end, so that the rollers are at one time on the upper side pressing against the lags, and at another time below the deck, and thus passing in succession one after another. The apparatus is portable, can be made for about fifty dollars, and is a durable and efficient machine. The inventors are Messrs. John A. and Hiram A. Pitts, of this town, who have secured their improvement by a patent.

The following is an extract from a report of a committee appointed by the Kennebec Co. Agr. Society to examine PITTS' improvement:

"Without meaning any disparagement to Lane's Horse power, which is a very good one, and which has been of much service in the state, it is thought that the one in question is in many respects an improvement. It is lighter, more easily constructed, as any blacksmith and house joiner can make or repair it. It is probably easier to the Horse, and will do as much execution. On the whole, we recommend it to those whose wants and situation require a Horse power for agricultural or other purposes."

THISTLE HARVEST.—Now is the very time to harvest your thistles, and, from appearances, some will no doubt have an abundant crop.—Down with them, sunshine or no sunshine, and carry them into your Hogstye or muck yard, provided they have not gone to seed or been long in blossom. And not only mow your own, but rouse up your neighbors to the business also. Some are particularly generous in this kind of crop, insomuch that they seldom cut it, but let the seed fly abroad for the benefit of the public. If in this respect these liberal souls would "let their charity begin at home," and cut their own crop and take care of it, there would be much less trouble and fewer *thorns* in the path of the farmer.

SICK CALVES.—A friend informs us that, having a couple of calves somewhat infested with lice, he concluded on one of the warm days of last week to give them a bath of tobacco juice, which he imagined would not only be a grateful and cooling application, but also disperse the vermin. Accordingly the calves aforesaid, were thoroughly sopped in the soup of the "Indian weed" and suffered to depart in fine sneezing order.

Soon, however, news came that the calves were dying. They were found lying prostrate, eyes rolled back into their *brains*, and tongues hanging out of their mouths. What was to be done? In killing one trouble the patient was brought to death's door. As a greater stimulus often overcomes a lesser one, the calves were again subjected to Hospital practice, and a quantity of New England rum was poured down their gullets—their heads laid in a situation higher than the rest of their bodies, and they were left to snooze away the effects of their dissipation. The next morning they were found "PERFECTLY SOBER."

For the Maine Farmer.

RAISING CREAM BY HEAT.

MR. EDITOR—I am inclined to think that a communication on the mode of raising cream, by heat, for dairy purposes, may be of service.

There are two important points gained in the making of Butter, with the cream prepared in this way, viz:—Economy of time, and an increased quantity of Butter from the cream prepared in this way. Fewer pans are needed, and of course fewer to buy and wash, while the time saved in churning is very remarkable.—I think, from the experience that I have had with my own cows, there is a gain of about 25 per cent. of butter. The process is simple.—Pans of a proper size will hold about a pailful; those I have are made of zinc, being more durable and not much more expensive. When the cows are milked, the milk is strained into a pan or pans and allowed to stand 12 hours. The pan is then placed upon an iron frame over WELL BURNT COALS, where it must be carefully watched, and on the appearance of the FIRST BUBBLE, taken off the fire, and after standing from 12 to 24 hours, according to the weather, the cream may be taken off, and then, if sufficient cream is collected, churned.

When the butter is formed, the butter-milk is drained off—cold water is put into the churn—worked well with the dasher—and renewed until it comes out clean. By this process the hand is but little used.

N. B. The surest way of discovering the first bubble is, when the cream is well risen, to open the cream or pass a pin through it in the middle of the pan, and the first bubble that appears there will indicate the proper time to remove it from the fire.

Your Ob't Ser'vt, CHA'S VAUGHAN.

For the Maine Farmer.

BEES.

MR. EDITOR,—I think the proposition of your correspondent "Sweet" concerning the construction of a Bee-house, a very good one; and as I have something such an one, I will for his edification, give you the construction of it.—My house is 8 feet square, with 7½ feet posts, set upon stone posts, about two feet from the ground—the floor boarded double—the walls with matched boards, and intended to be clapboarded—the roof is boarded with jointed boards below the ribs as well as above—this was done to regulate the temperature in hot weather, as well as to make it more tight,—Bee holes in the front, and a door in the back side. Across the front and on the inside I have two girts as high as I could have them, and place a hive on the top of them under the roof. These girts are filled with cross slats let into them, so that the hive may stand fair upon them—slats about 2 inches apart. I have likewise in the girts pins about six inches distant

from each other, upon which I hang small ladders reaching from the girts to the floor, or within six inches. Let them be far enough from the floor to sweep under without shaking them, and filled with sticks, or rounds (as they are called in a ladder,) so thick as to be a support to the comb. Upon the girts a hive waplaced,and the board removed from the bottoms The bees fill the hive and then work down, at. taching the comb to the slats in the girt and the ladders beneath. It is a very pleasant sight to open the door for a moment these warm days, and look upon them; but one must look out for his peepers, as they are not very ceremonious. I have taken out several hundred weight of honey since they were put into the house. The best time to take the honey is in cold weather, when the bees cannot fly. It can then be taken with perfect ease. The honey taken from the middle of the mass will in the coldest weather appear almost as warm as it does at this season. Care should be taken in the fall to place boards under the comb so near to it that the bees may creep up into the midst of the comb if by any means they should drop down, as they will die.

My bees, thus far, have done well, and I have no trouble with them. I am, however, inclined to think that drawers would be better, made so as to communicate one with another. I would make them precisely like an apothecary's, only have each drawer bottom up. The partition between them should extend entirely across, having a hole through it and through the top of the drawer to correspond with it, and fit so well that only a thin knife or spatula may be passed through the drawer and partition to break the connexion made by the bees. The front of each drawer should have a few small bee holes with corresponding holes in the walls of the house--the same care being taken not to allow room for the bees to crawl between the drawer and the walls, or they will fasten the drawer so that it will be difficult to remove it. Mr. Sweet, or any other gentleman, can have the privilege of taking a look at my house at any time when he or they will take the trouble to call. I am, &c. D. BALDWIN.

Mt. Vernon Village, July 15, 1834.

For the Maine Farmer.

WHITE WEED.

MR. EDITOR,—A writer in number 26 of your present vol., who signs himself a hater of Canada Thistles, says "he considers them a great nuisance," and he also says "he knows not of a more noxious weed." Bad as I consider them—and they are bad enough—they are harmless to farmers, to what White Weed is. This of all weeds should be attended to by farmers. Once let this get a head, or make any considerable progress on a farm, and I would hardly take the gift of it. Such a farm loses in price enough to indemnify the proprietor one thousand times for taking it all up root and branch into a basket, with a hoe, when he first observes a patch of it,—he must burn it, throw it into the pond, or into the middle of a road much travelled. This is the only mode of attack. Thistles, as he says, may be destroyed by the scythe, and you may hereafter have a good farm; but let white weed get ahead, and your farm is ruined to a great degree. I have seen within a few days, several patches of it in the highway. Unless attended to, we shall soon, very soon, be overrun with it. I beg every farmer to be wide awake to this subject. I would not purchase a load of hay or manure from the owner of a farm infested with white weed, much sooner than I would bring the cholera among us. E. F.

Winthrop, July 15, 1834.

For the Maine Farmer.

HAYMAKING.—People who work in warm weather at haying, should never permit themselves to become so dry as to need great quantities of water or other liquids at one time.—They should take it often in small quantities. If they necessarily become very thirsty, let them uniformly wash their face and hands in cold water, and rinse their mouths with it, before drinking. One great cause of haymakers and other laborers apprehending they need rum, to keep water from hurting them, (as they say,) is because they do not attend to the above hint. By taking spirit in this way, many have fallen into a habit which has ruined them. I wish those who take spirit when hard at work in the heat, would remember that it adds to the heat, or, if taken in any quantity to operate, its natural tendency is to produce fever.—Strong cider heats the system, and is still worse; but many cooling substitutes have been found, much better than either, and do not lead to bad or dangerous habits.—An ounce of preventive is worth a pound of cure.

AN OLD HAYMAKER.

For the Maine Farmer.

CONTROVERSY BETWEEN TWO WIDOWS.—HANNAH AND SARAH.

Sarah—Friend Hannah, thee seems to have things about thee.

Hannah—Yes, I am very comfortably on't.

S.—Well, thy husband and mine died about the same time, I think.

H.—Yes, I think they did.

S.—How many children has thee?

H.—I have two.

S.—Well, I have five, and I find hard getting along.

H.—I have found a great many friends.

S.—So have I, but I cannot expect them to maintain my family.

H.—Why, I administered on my husband's estate, and the Judge gave me $300, which was a great help to me. It was about all my husband possessed, besides the cost of administering.

S.—Well, I did not administer, for my husband owed nothing and had but little due him; but thee knows that thy husband owed him 25 dollars, which I depended much on, and think I have a right to expect thee to pay it to me, or at least, a part of it.

H.—I am sure, I have nothing to GIVE away.

S.—But don't thee think it would be right?

H.—I don't doubt it will be right if I had a mind to do it; but I am sure I have nothing to give away, for I am about to send my two girls to a Dancing School, and can hardly get money enough to pay their board.

S.—I have no such use for money; but I really hope that thee will refund, if but a small part of it, to enable me to buy my children some bread and school books; and I would ask thee what right the Judge had to give thee my children's property?

H.—I dare say the Judge knew what he was about for he is a very fine man, and I'll warrant you that he did nothing contrary to law.

S.—I know but little about law; but I have heard say that the law did not always do justice, and I am sure that men do not always.

H.—Well, I must tell you that I have nothing to give away to those that are able to work.

S.—Surely I am able to work, spin and weave, and some of my children begin to do a little of such kind of work; and why can't thy children work for a living as well as mine?

H.—I am sure they can work, for they do fine sewing and work muslin as well as any woman in town, and they save me paying out a great deal,—but if we had gone to spinning and weaving, and such kind of work, I don't believe the Judge would have given us one cent.

S.—I know nothing about the judge, but what I learn from thee—but after telling thee that there is a Judge that will judge righteous judgment between thee and me—I must bid thee farewell.

So came sounds to the ears of

OBSERVO.

From the Baltimore Farmer and Gardiner.

ART OF MANAGING SHEEP.

I have been very desirous of ascertaining the particular method in which Mr Barney of Philadelphia manages his sheep, that enables him so far to exceed every body else in producing fine mutton, and good wool.

On his late visit to this city, I put the question to him, wherein consisted his superior management of sheep? he gave the following reply:—He said, a gentleman visited him not long since, and on going to his sheep yard, and viewing it asked him the same question. He showed at that time from 50 ewes, upwards of 60 lambs, all lively and brisk, with a loss, *I think he said, of three or four.* The gentleman observed to him that he had his shed covered with dead lambs; and asked wherein the secret of breeding lay. Mr Barney observed to him, you stuff your sheep with dry food? Yes, as much good clover hay as they will eat, was the reply. Mr B.—You give them no water but suffer them to go out in time of snow and eat as they are disposed to do? Yes. Then said Mr. Barney, there lies the secret. Your sheep fill themselves with dry hay; they get no water; and they have not a sufficient supply of gastric juice to promote the digestion of the hay in the stomach; they cannot raise it *to chew the cud*; they lose their appetite, are thrown into a fever, and cannot bring forth their young, or they bring forth a feeble, starved lamb, that falls off and dies the first exposure to the cold or rain. On the contrary, I take care to provide my sheep with good clear water in summer and winter. I feed them regularly with hay through the winter, and give them ruta baga and mangel wurtzel every day. The ewes produced me 120 per cent. increase in lambs. You cannot, says Mr. Barney, get along without ruta baga and mangel wurtzel.

This gentleman has just sold his sheep for upwards of seventeen dollars per head to the butchers. It is his opinion that sheep are the most profitable stock that a man can raise; and it appears he makes use of no expensive food, or increased quantity of it. But the secret of raising good stock of every kind, consists in maintaining that regular and cleanly mode of proceeding which preserves the digestive organs of the animal in a healthy state, and enables them to convert what they eat into chyle, suitable for the nourishment of the animal.

The Season.--Since our last notice of the season we have had a favorable change of weather and vegetation has advanced with rapid strides. But it has been rather too wet to be most favorable for the Indian corn. The season, however, has not yet got so forward as usual, and our farmers have not done much at haymaking, though we believe they have pretty generally commenced. The hay crops with us will be large. At the eastward we are told that it will be lighter, owing to the long prevalence of cold easterly winds Though our stone fruit was almost entirely destroyed by the spring frosts, their loss will in some degree be compensated by a remarkable abundance of the smaller fruits. The native strawberry was, probably never more plenty. Raspberries and blueberries are now ripening, and they and the later berries appear like being equally abundant. Apples, though not so plenty as some years will yet be sufficiently so for the wants of the inhabitants. Of pears there will be but very few.

Worcester Spy.

ERRATUM.—In our last number, first page, for Carduas Canadeni read Carduus Canadensis.

By the gold bills just passed, sovereigns will be worth $4.85*a*87, and doubloons, $15.50*a*52.

From Dixon's Live Stock Manager.

HOGS OR SWINE.

NATURE, CIRCUMSTANCES, CHARACTER, ADVANTAGES AND USES.—These are animals which appear to have a middle nature between such as are graminivorous, which feed on herbs and grass, and those which are carnivorous, and eat flesh; possessing, in some measure, the distinguishing circumstances that are peculiar to each class. They are very numerous in their kinds, having spread and extended to most parts of the globe, though they are said not to have been originally found in America, but to have been transported thither by some of the first settlers in that country. In some places, where they have increased rapidly, they have become again in the wild state, but with shorter bodies, and more thick in the snout parts as well as in the skin.

These form the principal animals of the second or smaller division or class of Live Stock, and are of considerable profit and advantage in certain situations and descriptions of farm lands; such as those of the arable and dairy kinds, though a few may be kept with benefit on almost any sort of farms, as they live much upon the various kinds of refuse materials, that can only be used for such purposes. The hog, which is a name generally applied to animals of the swine kind, may likewise be kept with much utility in various kinds of manufactories, where large quantities of grain are made use of, as in those of the starch kinds, and in distilleries and breweries.

There is evidently much diversity in these animals, in different situations, and under different circumstances, which in this, as well as in all other sorts of live stock, should be particularly noticed by the breeder, keeper, and farmer, in order that he may have a good breed, which will constantly pay better than an inferior kind. Like most other description of farm animals, they, in some measure, require to be adapted to the nature of the keep, and the circumstances of the management under which the farm is conducted. They should constantly possess, as much as possible, the chief marks and properties of good hogs, which are those of the form or shape, the nature of the ears, and quality of the hair. The pendulous, hanging-down, or lop ear, and the coarse harsh hair, indicate largeness of size and thickness of skin; while erect or prick ears show the size to be smaller, but the animals more quick in feeding. Smooth, soft-haired hogs are most suitable for warm climates and places.

These animals have been stigmatized by many who seem to know but little of their real nature or habits, with being extremely filthy, and of an impure nature; but the fact is the very contrary; as they are particularly fond of cleanliness in every thing, though they may, like animals of the cattle kind, sometimes indulge, in hot weather, in wallowing in miry, dirty, and stagnated waters, for the purpose of cooling their excessive heat. Their stomachs are well suited by nature to the reception of a great number of substances that are nourishing to them, which, in other circumstances must have been wasted or lost, as the various refuse matters of the dairy, the kitchen, the garden, and the field, as well as some others. The nature of the form of them is extremely well fitted to the manner and habits by which they provide their food, being lower in the make than many animals, with a greater strength and thickness in the neck, the snout, and the length of the head, so as to turn up ground readily in procuring different sorts of roots, and their smell is acute, by which they have the power of readily discovering their proper food. Their natural inactivity and heaviness render them capable of speedily taking on flesh and fat, which is so laid on as to form a thick and regular layer on the surface of the flesh towards the skin. These animals seem to have a forboding or sort of fearfulness of bad weather, as before which they are restless; and in the time of high winds are often much disturbed, running about in a hurried manner, and screaming very disagreeably, at the same time carrying straws in their mouths to their habitations, and preparing, as it were, against such storms and impending bad states of the weather.

The flesh of these animals, especially in the tamed state, is very fine and wholesome, being easy of digestion. It is, of course, of very general use in many different ways; and for salting it has many advantages, as it takes the salt better and more readily; it keeps longer than most other sorts of meat, and consequently, is of vast utility for shipping and various other uses.

Swine are capable of living to the age of 20 or 30 years; but this circumstance can rarely or never be ascertained in this country, as they are mostly killed while young. In the ordinary management of swine, sows, after they have had two or three litters of pigs, are generally killed; but no breeder should part with one whilst she continues to bring large litters, and rear them with safety, although custom often induces the farmer to kill such sows, and to substitute others of not perhaps half the value in their places.

The characteristic distinctions of the hog, as given by naturalists, are, that there are four front teeth in the upper jaw, which are converging. In the lower jaw, six, which are projecting or prominent. Two canine teeth or tusks in the upper jaw, which are rather short; in the lower jaw two long, exserted or standing out. The snout truncated, prominent, and moveable. The feet, for the most part, cloven. It is a sort of animal, in some points, of an ambiguous nature, being allied to the PECORA, or cattle, by its cloven hoofs; and to the FERÆ, or wild beasts, in some degree, by its teeth, yet differing widely from both in many respects. It is consequently, supposed by some, to form at once a link between the cloven-footed, the whole-footed, and the digitated quadrupeds.

It is asserted by some naturalists, that swine are not indigenous to these islands, but probably without sufficient authority; they are no longer found wild either in this country or in France.

From the Genesee Farmer.

CATTLE—NO. XI.

SHORT HORNS.

In the preceeding number, I adverted to the Short Horns as prevailing extensively on the continent of Europe.. I shall now endeavor to trace their history and improvement in Great Britain.

Before, however, commencing upon this branch of my subject, I wish my readers distinctly to understand and to bear in mind, that the *Short Horns* as a *breed*, are entirely distinct from the "*improved Short Horns*," as a variety of this breed. In this country, the term Short Horns is unfortunately applied indiscriminately to the whole breed *improved* and *unimproved*; and hence the confusion and misunderstanding which has arisen in regard to these varieties. The Holderness, the Durhams, the Teeswaters, the Yorkshires, the Dutch, and the Lincolns, were all *Short Horns*, but entirely different and distinct from the variety now known as the "*improved Short Horns*;" and when a breeder or connoisseur makes use of the latter term, he means to be understood as speaking of nothing more nor less than the "IMPROVED SHORT HORNS."

The Short Horn breed of cattle was unquestionably introduced into England from Holland or Denmark, at an early period, but at what time is not now known. They were found chiefley in the counties of Lincoln, York, Durham, Northumberland, and Berwick, in Scotland. They were early known as the "Dutch cattle," and in spreading themselves through these several districts, they became acclimated to the different soils and climates, and of course assumed different characteristics. As a breed, they were particularly distinguished by the shortness of their horns, the bulk and coarseness of their forms, the thinness of their skins, and the little hair which covered them compared with other breeds. They were also in general good milkers, and fattened tolerably well, but their flesh was exceedingly *coarse*. In Lincolnshire particularly they were coarse in the head and horn, gaunt, raw boned, high upon the leg, and equally coarse internally, but producing a large quantity of flesh.

At length, in Yorkshire, along the bank of the river Tees, they began to be ameliorated in character, and vastly improved as milkers. It was here that the first change was noticed, and which was occasioned by the introduction of the Norman or Alderney bull, in the early part of the last century; and as Mr Culley justly observes "there never was a more fortunate cross."

Their original color was white and pied, and that of the Alderney being light red, the produce was not materially changed. The result of this cross was a great improvement in the quality of the flesh, a much earlier and quicker maturity, a greater depth of carcase, more tallow, and a great accession of milk. The principal excellence of the old breed, however, was their great productiveness as milkers, for with their ungainly appearance and coarse flesh they had little else to recommend them; but the Teeswaters, as changed by the Alderney cross, presented a new aspect. Their milk was richer, and more abundant and soon rivaled the very best of the Long Horns; and for the stall and pasture feeding, they were considered inferior to none except the Herefords. Their color became beautifully variegated with spots and stripes, and often *sheeted* with red and white, or black, or brown and white; and their hides became thinner, looser, and more pliable, and their hair more abundant and softer. But with all these excellences, they staill retained their natural defect of coarseness of flesh, which rendered them inferior to many other breeds for the table. Their large consumption of food, also, and the tenderness of their constitutions, were not materially altered by the cross with the Alderneys. But either from more careful selections and judicious breeding, or from some effect of soil or location, the Teeswater cattle seemed to advance in improvement, and to surpass all the Short Horns of the neighboring districts; and even at the present time, they are among the very best of the unimproved Short Horns. The quantity of milk which was given by some of their cows is astonishing; 36, and in some instances, 48 quarts per day are recorded as having been produced by the Teeswater cows.

The Lincolnshire cattle still retained much of their old character, and might have been regarded as fair specimens of the best of the old Dutch breed. They were *coarse* in every respect, but in many parts of the country, great changes have taken place through the introduction of the Teeswater and other breeds, and the improved Lincolns are now a very valuable breed.

The Yorkshire cattle, as distinguished from the Teeswaters, in the same district, were coarse before, light behind, thin quartered, large heads, shoulders and necks, and in every way ungainly in their appearance; but to compensate for these defects, they were enormous milkers. "The first variety of this species of cattle, which I can recollect," says Mr Marshall, "was a thick, large boned, coarse, clumsy animal, with monstrous buttocks; always fleshy, but never fat, and the flesh of bad quality." These were the original *Holderness* Short Horn cattle, so called from a small town in the north riding of Yorkshire, where they prevailed and were afterwards improved. By judicious crossings between this stock and those from the bank of the Tees, arose the present improved Holderness cows, retaining the great milking properties of the old Holderness and the grazing ones of the Teeswaters. These cattle have small, short horns, in the shape of a half ring, rather a long plain head, fine skin, legs seldom

too long, the carcase large but compact, good back and loin, and the general figure square; but they are not the species of stock for short keep, however small in size, as they are all great consumers.

The *Yorkshire cow*, as described on the 34th page of No 3 of the present volume of the Genesee Farmer, is the improved Holderness, crossed and re-crossed, by an "*improved Short Horn bull*," whose progeny were generally large milkers; and I wish my readers to bear in mind that the English breeders, make a difference between all these gradations of Short Horns. This cow produced a most valuable animal, and is the one which is now used so extensively in England for the dairy. It is so fully described on page 34, that farther notice in this place would be superfluous. It will there be seen, however, that their excellence as milkers is rather in the *quantity* than the *quality* of the milk, and that they do not make flesh until their milk is dried up; and I would here remark, that the term "Durham cattle," as there used by Judge Buel, has reference to the "*improved Short Horns*," as we shall see when I come to speak of them in my next number.

The Northumberland and Berwick cattle have partaken more or less of the same revolution and improvement which has characterized their more southern relatives. Their coarse, ungainly figures have given place to the more elegant shapes, and finer bones, of the improved breeds, so that their cattle now present some of the finest points of the improved animals.

Thus it appears that the *unimproved* Short Horns, as they are termed, comprise first,—the descendants of the old DUTCH BREED, in their primitive state; second,—the TEESWATERS, an improved cross between the old breed and the Alderneys; third,—the LINCOLNS, as improved by crossing with the Teeswaters; fourth,—the HOLDERNESS, also improved by a cross with the Teeswaters; and fifth, the YORKSHIRES, a cross between the *improved* Holderness and the "*improved Short Horns.*"

The term, "Durham cattle," is sometimes used to express the old unimproved Short Horn Durhams, but more generally the "*improved Short Horns*;" and it is in this latter sense that I have used it throughout these numbers, for the sake of brevity, and as being a term most generally understood in this country to mean that breed. But it would save a great deal of misunderstanding and perplexity, if the breeders and others in this country having occasion to speak or write of cattle, would always designate the "*improved Short Horns*," as "COLLING'S IMPROVED BREED; for all the other varieties are more or less improved, and are constantly alluded to as improved Short Horns, by all classes of dealers, and especially by those who have unimproved varieties.

As the Teeswater cattle first became the subjects of improvement, so did they continue to sustain their excellence and celebrity until greatly surpassing the other Short Horn varieties they finally became the basis of "Colling's improved breed." The history improvement and extension of this breed, shall form the subject of my next number.

In conclusion, however, I would remark, that the "Short Horns" which have been alluded to in these numbers, and which are so often mentioned as supplanting the other breeds in England, have reference almost exclusively to the Teeswaters, Holderness and Yorkshires, and not to "Colling's improved breed;" for this in its pure state has not extended generally throughout the kingdom. For the dairy, the Yorkshires have taken the preference, and the Teeswaters for grazing. What constitutes the difference between these cattle and Colling's breed, we shall see in the next number. QUERCUS.

From the New York Farmer.

How they do in New York.—ED.

VISIT TO THE DAIRY FARM OF MR. DAVID S. MILLS.

On the 5th May we crossed the Williamsburg ferry, and after a walk of five miles on the turnpike road to Jamaica, reached the residence of Mr Mills. The appearance of the country along this road has been improved, within three or four years by an increased attention to the cultivation of the land. There is, however, ample room for further improvements, both in tillage and in all those ornaments of a rural residence that indicate comfort taste, and enjoyment at sweet home. Among the objects of garden culture are seen fields of peas and raspberries, planted in rows. The former were four to eight inches high. We saw one farmer harrowing a field of sward ground, the sod of which had been broken by cross ploughing. The ground was very moist, and it seemed as though he might harrow until July before he could kill the grass. Had he carefully turned his furrows in the first place, used a roller, and then harrowed lengthwise with his furrows, he would have saved labor and added to the fertility of the land.

Mr Mills' farm consists, including 30 acres of salt meadow land, of 200 acres. He bought it last summer for $8,000, and commenced operations on it last September. It had been much neglected for years past, and a great part of it allowed to be overgrown with with moss, wild grass, and cedar brush. In six months from this time, after spending four or five thousand dollars in improvements twenty thousand dollars would not probably buy it. Since September last Mr Mills has put on upwards of two thousand loads of manure obtained from the city. These loads nearly equal those of two horse teams among farmers.

The first object that struck our attention on approaching this farm is a large stone building for stabling cows. It is 154 feet long, 40 wide, 20 high to the eves of the roof, and the wall 2 feet thick. The stone of which it is built was obtained from the fields of the farm. There are two rows of stalls for the cows, between which is an open space, paved with stone, ten feet wide, into which opens a door of equal width at each end of the building. In the center of the sides of the building is a similar passage way, for the purpose of carrying out the milk. The long passage is for the convenience of preparing their food. Each stall is near three feet wide, and the whole building will accommodate 100 cows. There are 12 windows on each side, for the purpose of light, air, and throwing out manure. Along the whole length of each side of the building, four feet high is to be a receptacle for the manure, made tight with thick plank, and sufficiently wide, ten feet, to back in a cart. The cows stand on plank and pavement of stone. A space of about two feet wide runs the length of each row of stalls, paved with small stone, on which the cows place their fore feet. From this space the flooring of plank has a gradual slope to carry off the urine. A raised walk of planking, about three inches high and two and a half feet wide, along the side walls of the building, arrests the urine and causes it to run out at the ends of the building, where, we believe Mr Mills intends to have cisterns for receiving it. In the loft over the stalls, will be rooms fitted off for lodging the hands who milk, and have charge of the cows; also, bins for the grain and feed, and a mow for the hay.

Mr Mills has had much experience in the milk business—having for many years carried it on in the city. He has acted on the principle that an abundance of the best kind of food was the most profitable. Accordingly, he rejects distiller's swill and feeds his cows on Indian meal, oil cake, ship stuff, and good hay. He mixes two quarts of Indian meal and two of oil cake, with about the same quantity of brewer's grain, or ship stuff, for a mess, twice a day; besides this he feeds with hay twice a day. Instead of hay in summer he uses green fodder—sows four bushels of oats mixed with one of corn to the acre—will sow several acres of corn and ten or twelve of ray, at the rate of three or four bushels per acre. The rye comes in first, then the oats, and after the corn. By sowing each of these at different times, a constant succession of green fodder is obtained until late in the fall. Mr M. will undoubted give attention to perennial grasses, and to succulent crops. In consequence of thus feeding his cows, they are always in a thriving condition. In the fall and winter, with the same course of feeding, they are in fine order for the butcher, to whom they are sold as soon as they begin to decrease in milk. They bring him for beef, from $40 to $55, averaging $45 per head. Their places are immediately supplied at 25 with calf.

When milked twice a day, the hours for milking are 2 o'clock in the morning and 12 at noon. The milk, when brought from the cows, is carried to the kettles, which are kept standing in large tubs of water fresh from the pump, and is poured into them through double strainers. Each cow will average abont ten quarts per day; some of course will give as many as twenty or more. The number of cows are upwards of 150. The price which Mr M. always obtains, is 6¼ cents per quart.

150 cows, 10 quarts per day,	375	galls.
These give in 365 days,	136,875	"
Price per gallon,	25	cents.
Amount per year,	$34,228,75	

An enterprising and intelligent farmer, who supplies milk to the inhabitants of one of the largest towns in Connecticut, recently called on us to direct him where he could find a milk establishment in the vicinity of the city, from which he could learn a few lessons. He said he found by close calculation that his cows averaged the year round only four quarts per day; and that his feeding was deemed superior to that of farmers generally. He visited several establishments, but, we believe did not obtain much satisfaction. On reading this article, he will we doubt not, take a journey of 100 miles to see what Mr Mills has done.

Most of the milk used in this city is sold at 4 cents per quart, a very considerable portion of which is water; but Mr Mills goes on the principle of never allowing a drop of water to be added to his milk. Taking into consideration the rich and wholesome food of his cows, their healthy and cleanly condition, and the consequent pure and rich quality of the milk, Mr Mills is not only deserving of 6 ¼ cents per quart, but of the thanks of the community for setting such a worthy example in furnishing this important article of food. We would not imply, however, by these remarks, that there are no other milk men who furnish pure milk of the first quality.

It requires eight men to attend the cows and sell the milk. These men, every day in summer, milk twice and go to the city, and feed the cows twice, and curry them once. In addition to this labor, there is that of throwing out the manure and keeping the stables clean. The ground food is put in tubs, and the hay in racks. The practice of cutting the hay is not yet adopted to any extent.

His Indian meal costs $1,50 per 112 lbs., and his oil cake which is procured from New Jersey and New London, $1,25 per 100 lbs.

For 15 years, Mr M. followed the usual practice of feeding his cows with slops and a little hay. Since 1823, he has pursued his present practice, and finds it more profitable. This arises principally from the additional quantity and superior quality of the milk, enabling him to obtain good customers and full prices, and from the increased price of his cows when sold to the butcher.

The value of the manure made by upwards of 150 cows is estimated to be worth, on the farm, $1,000 per annum. It is easy to see that all this regularly applied, will enable Mr. M. to make his farm one of the most productive in this section of the country.

Mr Mills has a first rate improved Short Horned Durham bull. He intends, hereafter, to devote more attention to rearing his own stock. His facilities for selecting breeding cows of the desired properties are very great—having it in his power to test them practically and fully as to their disposition to fatten, the quality and quantity of their milk, and to other properties that make first rate milkers.

It is our intention to visit this establishment again, when the improvements now in progress will be further advanced, and when we hope to have the pleasure of finding Mr Mills at home, which was not the case on the present visit. This last circumstance must be our apology for the imperfection of this hasty notice.

GRASS AND APPLES FOR SWINE.—There is no question but that some farmers fatten their hogs at half of the expense that it costs others. Travel almost any considerable district of our country, you will find at this season of the year one half of the swine running in the streets, and fed on nothing but thin swill. As soon as the corn

is gathered, these pot bellied and meager creatures are shut up in pens, and fed on unbroken corn until they are fat. In this way we have known farmers to feed away their whole crop of corn, and obliged to either buy more corn or kill them not sufficiently fattened. Other farmers will keep their swine in a thriving growing condition through the summer, and when the time comes to shut them up to be fed on corn, they are more than half fat. They thus save the greater portion of their corn for family use and to sell.

The celebrated agriculturist, Arthur Young Esq pastured, in 1776, sixty hogs of various sizes, on only two acres of clover. They kept in good condition, and grew remarkably fast. In connection with feeding on sweet apples, many farmers in this country have entered extensively into the plan of fattening their hogs on grass. If a shady, comfortable and clean pen into which the apples are thrown, is made in the clover field, the hogs will remain in it the greater part of the time, and thus much manure may be saved. Unless the orchard contains a greater proportion of sweet apples, this plan is better than to turn the hogs into the orchard. It will often happen that large quantities of leaves and other suitable suostances may be obtained near the pen, and which may be carted into it with comparatively little trouble.

MECHANICS.

From the London Mechanics' Magazine.

FIRE ENGINE SUCTION PIPES.

Sir,—In reply to the inquiry of Mr. Moore, in your last number, on the construction of suction pipes, I beg leave to submit the following, hoping it will meet his wishes:—

Suction pipes were at first made of short metallic cylinders, enclosed in a leather hose.—But these short cylinders soon gave place to a continuous spiral strip of metal, which was also eventually superseded by a spiral helix of stout wire, enclosed in leather of a greater thickness than that at first used, and this constitutes all the improvements that have been made in the construction of LEATHER suction pipes up to the present time. As now made they are sufficiently flexible and not easily crushed, but very few are AIR-TIGHT at first, and still fewer continue to be so for any length of time.

A great deal depends upon the leather being perfectly sound and the seam carefully closed; it is always advisable to use as short a suction pipe as possible; they should never exceed seven feet; if a greater length is required use two shorter lengths.

Hancock's CAOUTCHOUC suctions, however, combine in a very high degree the necessary qualities of flexibility and strength, with the property of being PERFECTLY AIR TIGHT. If it be wished to keep a fire engine in perfect order, whether the delivery hose be of leather or caoutchouc, I consider it absolutely necessary that the suction pipe should be of the latter material.

It occurred to me some time since, that suction pipes, and even delivery hose when great pressure is not to be sustained, made of painted canvas, or sail cloth, might be found to answer. A suction pipe, which I made in this manner, for a fire engine of small dimensions, does exceedingly well; but how far it may succeed upon a larger scale remains yet to be ascertained.

The mode of painting to be employed is that invented by Mr. William Anderson, of H. M. dockyard, Portsmouth, and described in the Transactions of the Society of Arts, vol. 26, page 135. It is briefly as follows:—Grind 96 pounds of English ochre with boiled oil, and to it add sixteen pounds of black paint, which mixture forms an indifferent black. A pound of yellow soap, dissolved in six pints of water over the fire, is mixed while hot with the paint. This composition is then laid upon the canvas (without being wetted) as stiff as can conveniently be done with the brush, so as to form a smooth surface; the next, or still better, on the second day, a second coat of ochre and black (without any, or but a very small proportion of soap) is laid on, and allowing this coat an intermediate day for drying, the canvas is then finished with black paint in the usual way.—Canvas painted in this manner is pliable, durable, and impervious to water, without any stickiness or tendency of the paint to crack or peel off.

In conclusion I will just observe, that suction pipes should always be kept as straight as possible; nothing injures them so much as continual bending about.

The straighter they are kept the longer will they continue useful, and the easier will it be to screw them on to the engine.

I am, Sir, yours respectfully,

WILLIAM BADDELEY.

August 3, 1830.

THE SECRET OF THE COMPOSITION OF THE SCHWEINFURT BLUE.—A portion of very fine blue pigment was placed in the hands of M. Braconnet, by M. Noel, for examination. It was the produce of a manufacture at Schweinfurt, where the preparation was kept secret.—M. Braconnet readily ascertained it to be a triple compound of arsenious acid, hydrated deutoxide of copper, and acetic acid; so that it approximates to the green of Scheele. After various trials to form it, the following was found to be the best. Six parts of sulphate of copper were dissolved in a small quantity of water; also, six parts of white arsenic, with eight parts of potash of commerce, were boiled in water, until no further quantity of carbonic acid was disengaged. This hot solution was gradually mixed with the first, continually agitating until effervescence ceased; an abundant dull yellowish green precipitate is formed. About three parts of acetic acid were then added, or such a quantity that a slight excess was sensible to the smell; gradually the precipitate diminished in volume, and in some hours a slight crystalline powder was deposited at the bottom, of an entirely colorless solution. The fluid was poured off as soon as possible; and the powder, washed with plenty of boiling water to remove the last portions of arsenic, was then of a brilliant color.

Care must be taken not to add to the cupreous solution an excess of arseniate of potash, as it causes waste of the acetic acid afterwards added, as the latter must be in excess. In repeating the process in the large way, an arseniate of potash, prepared with eight parts of oxide of arsenic, instead of six, was used, and the result was very successful. M. Braconnot thinks that probably a slight variation of the proportions he has given may be found advantageous; but in the mean time he considers it right to give the best process he is able for the preparation of a color so beautiful, and which may be so valuable in the arts.

London Mech. Mag.

HOW TO GILD MANUSCRIPT WRITING.—Dissolve a little gum ammoniac in a small quantity of water, in which a little gum arabic and the juice of garlic have been previously dissolved. Write with this liquid instead of ink, or form characters with it by means of a camel's hair pencil. Let the characters dry, then breathe upon them, and apply leaves of gold to them as for any other kind of gilding. The superfluous gold may be removed by a brush, the writing will then appear covered with gold and may be burnished.

IMPORTANT INVENTION.

Safety. The apparatus for checking carriage wheels, invented by R. Jarvis, Esq. is worthy of public attention. It can be fitted to any vehicle, old or new, for a moderate expense, and is easily managed.

It will be useful in confining horses, or preventing them from running away, when harnessed to vehicles and left standing without being tied.

Applied to stage coaches it will put the horses under the command of both passengers and driver; the means for checking either fore or hind wheels terminating inside of the coach, within reach of the former, and also forward within reach of the latter. Should the driver in stopping leave his horses untied, or should he attempt to race, or be thrown from his seat, or should the horses attempt to back over a bank or precipice, the wheels can be instantly checked by the passengers. So, should the coach contain no passengers, and the horses attempt to back or run, the wheels can be checked by the driver.

It will be useful on fire engines, in suddenly stopping them when necessary, and thus preventing the accidents that sometimes occur from their rapid movements.—*Boston Traveller.*

New Invention.—We have examined the drawing of a machine to gather grain as it stands in the field without cutting. It is called the Locomotive Thresher, intended to be moved by horse power, and with the assistance of three men or boys of fifteen years of age, it is calculated to go over ten acres of wheat or other grain per day and gather say two hundred bushels, leaving the straw standing on the ground threshed as clean as is generally done in the ordinary way, thereby saving all the expense of harvesting; and by ploughing in or burning the straw, it is supposed the ground may be tilled ad infinitum without diminishing its fertility. Should this invention succeed, it will afford another inducement for farmers to inhabit and cultivate those beautiful prairies which abound in the far West. The ingenious inventor is Mr John T. Vail, of La Porte, Indiana formerly of this town.—*Rahway Adv.*

It is probable that the use of locomotive will become common on ordinary turnpike and other hard roads, with moderate ascent or descent. The following is from the Birmingham (Eng.) Gazette:

Dr. Church's steam carriage was started for the first time on Friday evening, passing from the manufactory along the Greenlanes, and turning in fine style through the Small heath gate, from whence it passed along the Coventry road. It proceeded at a very rapid rate (say from fifteen to twenty miles an hour) with a great number of persons, (upwards of forty) upon it for a considerable distance; when in turning short upon the road, the hind part struck the foot path, and broke a small appendage to one of the valves. It was deemed advisable not to work the machinery farther for fear of accident, but to attach the ropes and haul it back by the workman. The machinery, boilers and frame work have since been examined, and every part, excepting as above and a connecting tube to the water tank, *was found quite sound and uninjured.* The carriage will be put in complete order in the course of a few days and will shortly be run upon the turnpike road, to enable the conductors to acquire the necessary experience. The trial is highly satisfactory to the power of the engine.

PERMANENT INK.—Mr. Murray says he found ink made of the following ingredients triumphant over the most violent chemical agencies, and of whose permanence in valuable records there can be no doubt:

1-2 oz. of a solution of nitrate of silver.
1 oz. " nitrate of iron.
1-4 oz. " prussiate of ammonia.
1-2 oz. of tincture of galls.

A portion of finely levigated Indian ink and gum arabic added to these ingredients is recommended by Mr. Murray. The fluid ounce is to be here understood.—*English paper.*

SUMMARY.

LATEST FROM EUROPE.

By the packet ship North America, Capt Dixey which arrived at this port on Thursday, we have at length received advices from London and Liverpool to the 31st of May.

The most important item of intelligence is that which apprizes us of a very material change in the British Ministry. In consequence of a disagreement on the subject of the modification of the Tithe system in Ireland, the following members of the Cabinet tendered to the King their resignation.

Hon. F. G. Stanly, Secretary for the Colonies;
Sir James Graham, First Lord of Admiralty;
Duke of Richmond, Post Master General;
Earl of Ripon, Lord Privy Seal.

These resignations, were all accepted, reluctantly, of course on the part of His Majesty, who is himself equally adverse with themselves to all assaults on the immunities of the Established Church; and Lord Grey was left to his own unlimited discretion in the re organization of the Cabinet, which was effected as follows:

The Earl of Carlisle, Lord Privy Seal;
Mr Ellice, Secretary of War;
Mr Spring Rice, Colonial Secretary;
Lord Auckland, First Lord of the Admiralty;
Lord Mulgrave, Post Master General.

Mr Francis Baring (son of Sir Thomas Baring) to succeed Mr Spring Rice, as Secretary of the Treasury.

Mr More O'Ferrall, an Irish Catholic, succeeds Mr Baring as Junior Lord of the Treasury.

The four first will have seats in the Cabinet. It is not intimated that Lords Grey and Brougham will in any event retire from their present situations; but it must be obvious at a glance that the Administration have lost much and gained nothing by this change. Mr Stanly was unanimously considered as one of the most powerful and influential debaters in the House, and it is evidently feared by his late associates that he will attach himself to the Conservative or Tory section of the Opposition. The Duke of Richmond, too, enjoys a high degree of popularity.

The London Times, the most popular and widely circulated journal in the world, takes ground against the new arrangement. On the other hand it is stated that a large majority of the Houses of Parliament, including a great number of the most distinguished members of the Opposition have addressed a circular to Earl Grey entreating him not to resign in the present critical juncture.

The King, on the occasion of his birth day, was waited on by the whole Bench of Bishops, to whom in a speech, he spontaneously expressed his unaltered determination to mantain to the last the rights of the Church, whether in England or Ireland. He is said to have shed tears while addressing them.

FRANCE.—The session of the Legislative Chambers was closed by proclamation and a new election of Deputies ordered, to take place on the 21st June. It is said that the Republicans and Ultra Royalists are in some districts coalescing in the support of candidates hostile to Louis Philip and his Ministry.

M. Dupin, President of the Chamber of Deputies, has gone to London for a month; and it was rumored that Lord Durham would be sent by Earl Grey on a mission to Paris, but generally discredited.

SPAIN is yet full of Carlist Guerillas, but the government appear to apprehend no imminent danger from them. The Junta have rejected all the propositions which had been made for a new loan, on the ground that they were not sufficiently favorable, considering the rapidly improving condition of the country and her resources, and that the necessity is not pressing. The Queen has declined to recognize the debts incurred by the Cortes during the ascendancy of liberalism, but has referred the matter to the new Cortes, who are soon to assemble. The Pope's Nuncio has received his passports, on account of his intrigues against the existing government. There is an absurd rumor that Don Carlos had thrown himself into the hands of Don Pedro.

London, May 27.—The news from Madrid contained in the Paris papers of Sunday which comes down to the 16th instant is unfavorable. At that time the state of Madrid is described as exciting much uneasiness. The *Messager* goes so far as to say that, for some days past, seditious riots were the order of the day at Madrid, and that, in fact it was the anarchists, emboldened by the feebleness of the Government, who reigned at Madrid. Further changes are again talked of. M. Martinez de la rosa is said to wish to supercede Zarco del Valle, the Minister of War, by General Balanzat, a friend of Mina; M. Imaz, the Minister of Finance, by M. Banqueri. Morillo is to supersede Quesada, and try his had at pacifying or subduing the provinces of the North, where the Carlists seem not to be losing ground. The financial difficulties of the Government are described to be on the increase, and there is no hope of conquering them until the Cortes are assembled.

PORTUGAL.—Accounts from this long distracted kingdom are still contradictory, though it can be no longer denied that the Pedroites have gained signal advantages in the taking of Coimbra, Figueiras, &c. The following is the latest account:

Plymouth May 28.—Arrived this morning at 5 A. M. the County Pembroke steamer, Matthews, master; left Lisbon on the 14th, Oporto on the 18th, and Brest yesterday morning. Her arrival at the last named place has been no doubt telegraphed to London long ere this. No news of consequence is brought by her. Santarem was expected to fall daily, and they expect it has fallen by this time. It is said Don Miguel had attempted an escape, but was surrounded and obliged to retire to his previous quarters.

Great Fire in New York. A destructive fire broke out at one o'clock yesterday morning, at 209 Pearl street, New York, which destroyed buildings and property believed to be over $200,000.

So rapid had been the progress of the flames within before the fire was known without, that the entire building was almost instantly enveloped in flames before twenty persons had arrived on the spot.

The whole of the building, with all it contained was soon a heap of burning ruins. On the arrival of the engines, so intense was the heat, that it was for some time impossible to approach within playing distance.

There was insurance to the amount of $165,000 divided among nine offices. Messrs. Doremus, Suydam & Co, were insured for $40,000, which is not sufficient to cover their loss. John Rankin and Petit & Dunning were insured to the full amount of their loss. Brett & Doremus, Revo C. Hance, Bowen & Addom, and T. H. Messenger, are generally insured. *Transcript.*

Three persons have been arrested in Arkansas Territory lately, for passing and having in their possession, a large amount of counterfeit bills, on the Bank of the U. S. One of them, in attempting to escape, received in his back, a charge of shot from the gun of one of the officers, which stopped him, and he was retaken; he soon, however, so much recovered as to make another attempt to escape, but he was unsuccessful. Some of the bills which they had in their possession, are said to have been well executed. Others are supposed to have been engaged with them, in their unlawful proceedings.

Small Pox and Varioloid.—These loathsome disorders have prevailed to a considerable extent recently in Providence, introduced by an Irish woman, on her way from N. Haven to Boston, having an infant covered with eruptions. The number of cases amount to 79—38 of small pox and 41 of varioloid. Of the former, 11 cases have terminated mortally, and all the cases of small pox have been severe. Those of the varioloid have been light. The disease still continues, but has very much diminished.

New Invention.—A blacksmith in Virginia has invented a machine for striking, which enables blacksmiths to dispense with a striker, and at the same time, perform, with the aid of one of these machines, double the amount of work, which they can with the aid of one of the best strikers. The machine is propelled by the foot in the ordinary manner of turning a lathe.—The inventor has secured a patent right.—*Balt. paper.*

Five couple were divorced by the Supreme Court, which was in session in Belfast, on Tuesday the 8th inst. It is not long since, that a man, in that place, was sentenced to one year's imprisonment in the State Prison, for having married a second time, while his first wife was living.

In Plymouth, Mass. the fourth of July was celebrated, by the forming a procession, in which was drawn, by a powerful team, to a place of safety in front of Prilgrim Hall, a portion of the rock, on which our fathers first landed, and by an address by Charles Cotton.

MARRIAGES.

In Leeds, Mr Philip Turner to Miss Mary L. Howard.
In Readfield, by Josiah Whittier, Esq. Mr Henry Dudley, of Mt. Vernon, to Miss Mary Whittier.
At Washington, on the 17th ult. Mr Joshua Peck to Miss *Amelia Bushel.*

Adzookers, bobs, and wedding cakes!
What change of *measures* marriage makes!
Quick as a thought, at Hymen's beck,
A *Bushel's* changed into a *Peck.*

DEATHS.

In Augusta, suddenly, Mrs Thankful S. wife of Mr Watson F. Hallet, aged 39.

Drowned, at Worromontogus mills, on Friday last, John Barton, aged 18, son of *Hannon* Barton.

Drowned in Vassalborough, George Stevens, son of Jacob Stevens, aged 14 years, and Benjamin Hutchinson, aged 13 years.

In Mount Vernon, on the IIth inst. Mrs Anna, wife of John Hovey, Esq. of Augusta, aged 75.

BRIGHTON MARKET—MONDAY, July 7.
(*Reported for the Boston Daily Advertiser & Patriot.*

At Market this day, 290 Beef Cattle, 28 Cows & Calves, 3275 Sheep and 50 Swine.

PRICES. *Beef Cattle.*—A falling off from last week of nearly 25c per 100 lbs.; the Cattle generally being of an unusual good quality, a few were sold nearly as high as last week. *We* quote prime at 5 67 a 6; good at 5 50; thin at 4 25 a 4 75.

Cows and Calves—We noticed sales at 18, 21, 22, 24, 25, 27 1-2, 30 and one at $40.

Sheep.—There was a great difference in the quality, and sales were effected to correspond. *We* noticed lots taken at 1 33, 1 38, 1 42, 1 62, 1 71, 1 88, 2 and 2 17; also lots at 2 25 and 2 37. *We*athers at 3, 3 33 and 3 50.

Swine—We noticed one lot large *Hogs*, more than half barrows, taken at 5c.

POETRY.

For the Maine Farmer.

RURAL PLEASURES.

SUMMER.

Now Philomela's left the plains,
  Another vernal clime she's cheering,
And other birds, with tender pains,
  Are helpless little nestlings rearing.
Around the barn in rapid flight,
  The airy little swallow's twit'ring,
In evenings calm, and sunbeams bright,
  The sportive insect tribes are glit'ring.

Now earth abounds with herds and fruits,
  Each growing, ripening in its season,
The grass is food for grazing brutes,
  And fruit regales the man of reason.
The cow affords us wholesome milk,
  The sheep, our wool for clothes, when freezing—
The silkworm spins the finest silk,
  A nicer lighter dress, more pleasing.

Good farmers now are never slack,
  They all are haying, hoeing, reaping;
The hay and grain, in barn or stack,
  Are safely stored for future keeping.
The blazing sun heats all around,
  Save when there's clouds or rain or shower;
The herds at noon leave open ground
  And seek the pool or shady bower.

Soon after all was calm and fair,
  There's oft terrific peals of thunder,
And then the lightning's livid glare
  Oft tears the firmest trees asunder.
There is a GOD who rules above—
  Then may we learn to love and fear him;
His wond'rous works are sent in love,
  To bring our minds and hearts more near him.

The plants did fail, and dry was earth—
  Now they're refreshed by genial shower;
There's nought could save from fearful dearth.
  But an Almighty wond'rous power.
The rainbow's seen upon the cloud,
  A cov'nant sure, and gracious token,
That men may learn to trust his word,
  In love, in truth and mercy spoken.

Winthrop. PHILOMEL.

MISCELLANY.

From the American Traveller.

THE BETROTHED.

The lover watched the setting sun,
And wished his daily course was run,—
For when the dial pointed seven,
He vowed to wed, before high heaven,
The fairest maid that ever trod
The lonely Hudson's verdant sod:—
The hour arrived,—the maid came not;
The sun behind the mountain sat,
But in her stead, a savage bore
Her scalp, fresh stained with clotted gore;
He groaned and fell upon the stone,
While reason's light forsook her throne.

Near the confines of Fort Edward stood a small cottage, within whose walls an aged couple, and a grand-daughter of eighteen, had long resided. Cheerfulness and tranquility marked the hospitable dwelling, and oft as the weary savage returned from the toils of the deer hunt, he would stop, and after refreshing himself, pronounce a blessing upon them and depart.—There was not a chief on the borders of Lake George, but what knew the generous white man of the woods. His cottage stood unmolested amidst the general ruin of its less fortunate neighbors. One evening, as the sun slowly left the western horizon, its inmates were seated around their evening repast, when a loud groan was heard, borne on the fitful breeze of night, from the gloomy forest. The old man started from his seat, and taking his hat and cane, departed from the cottage, turning a deaf ear to the objections of the affrighted females. The last rays of twilight lingered upon the tops of the mountains as he plunged into a thick copse, from which the noise proceeded.

As he walked onward, he perceived the body of an English officer, apparently lifeless, lying upon the leaves. He drew nearer, and gently accosted him; but no answer was returned to his friendly tone. He then raised him upon his back, and groped his way back to the cottage. Upon arriving there, he hailed for admittance; the old lady, after reconnoitering the premises, let him in, thanking heaven for his safe return; but as he drew nearer the fire, she saw drops of blood upon the snow-white floor, and immediately fainted. The youthful Jane, for such was the grand-daughter called, entered the room to learn the cause of the groan, when she perceived her grand-mother upon the floor, and her grand-father standing with an English officer upon his back. She would have fled—but the sudden command of the old man for her to clear away the trumpery from the bed so that he could lay the stranger where his wounds might be dressed, detained her. The old lady by this time had revived, and hearing the well known voice of her husband, sprang up; and with their assistance the officer was soon laid upon the well filled bed. After they had rubbed him and dressed his wounds, his blood began to flow through its regular channels—and he fell into a deep sleep. The next morning, on opening his eyes, he stared wildly round the apartment; the beautiful Jane however entered, and finding him awake, offered a cooling draft of herb drink to his parched lips; he drank it, and asked her to relate to him the circumstance of his being there wounded. She informed him of his having been found in the forest, the method adopted for conveying him to the cottage, &c.

"It must be," said he, "that rascally Mingo, whom I ordered to be punished yesterday; he vowed revenge"—and then related to Jane the cause of his being so far from his camp. He left the fort for the purpose of hunting; and as he sauntered among the thick groves in pursuit of the drumming patridge, his path became bewildered, and at the close of day, he found himself in the midst of an almost impenetrable forest: his gun becoming wearisome, he dropped it upon the ground, and soon after, a blow was inflicted upon his head from behind. From that moment until this time, he had not been conscious of any circumstances which had transpired.

The blushing girl was pleased with the elegant person and cultivated mind of the British officer; and the gallant son of Mars, determining not to be behind hand, fell in love also.—After resting himself a short time, he prepared to return to the camp. He offered his purse to the old man, which was refused; and then, with many protestations of gratitude, he departed, promising to call again, so soon as he should be at liberty. A week rolled away, and he, true to his word, returned. After frequent visits and numberless walks with Jane upon the shores of the Hudson, he declared his love, and was received by her. At length, a marriage day was fixed, when he was to come with a small band and escort her to the fort, where the ceremony would be performed by the Chaplain of the Garrison. The marriage day arrived—the betrothed was anxiously waiting the arrival of her lover, when she was startled by the sudden whoop of a party of Indians—the girl was almost speechless through fear, as the chief, approaching her, delivered a letter from her beloved David. Upon breaking the seal she learnt that he was ordered upon Garrison duty that day, and could not come himself; but requested her, notwithstanding, to accompany the Indians, who, he assured her, were true to his interest, and would escort her in safety to his arms. His proposal she acceded to against the will of the aged couple; and seating herself upon the milk white pony, which he had sent for that purpose, the escort began their line of march. As they drew near an open field, they encountered another party, whom he had sent, lest the first should miss the way. They met, and high words arose; the last party, fearing that they should lose their reward, which was a barrel of rum, one of the Chiefs, placing himself behind the unfortunate Jane, cleft her head with his glittering tomahawk; and then dividing her scalp, each band took a part of it, and returned to the camp.—The lover stood upon the green as they approached, and seeing the pony return unladen, thought she had refused to accompany them; but when the chiefs advanced to him and presented the bloody scalps, he started back with horror, and fell senseless upon the green.—The usual remedies were applied, and he revived; but reason had left her throne. In the course of a few months, however, his senses again returned; but the once cheerful soldier was now a broken hearted man. He sought the spot where his beloved was buried, and building a hut upon it, secluded himself from the haunts of men.

* * * * * * *

Seven years afterwards, as a squatter with his family from New England, were journeying towards the west, they discovered a hut; and upon entering, found a man in the last agonies of death, clasping in his hand a lock of auburn hair, and a paper, requesting the one that should find him, to bury his remains in a new made grave, beside another mound beneath the shade of a lofty pine. This request they fulfilled, and upon looking at the tree, perceived this inscription upon the bark:—

JANE MCREA,
Murdered by the Indians,
1777.
DAVID JONES, R. ARMY,
her betrothed husband.
1784.

LIST OF LETTERS

*R*emaining in the Post Office at Winthrop, July 1, 1834.

Alden *A*ustin	Samuel King
*R*oland Briggs	*B*enj. Kimball, Jr.
Ruben *B*ranerd	Jno. Kimball
Miss L. Berry	Thomas N. Lord
Lavina Chandler	Otis L. Macomber
Alpheus M. Chandler	Martha L. Mitchell
Luther Cooly	Benj. Packard
Nathaniel Dolton	Nathan Packard
Daniel McDuffie	Nathaniel Page
Hannah Dicker	Thos. S. Pullen
Gideon Dexter	John *R*emick
Joseph *F*owler	S. M. *R*ice (2)
John E. Follet	Benson Torsey
Betsey Freeman	Hannah Tilton
Harriet E. Fales	David Warren
Robert N. *H*opkins	Amos *W*oodward
Joseph Heselton	Joshua Wing
Jno. S. Jackson	Alexander Wing
Benj. H. Joy.	Elijah Wood
Stephen Jones	

GEO. W. STANLEY, *Post Master.*